

High Resolution Built-in Varifocal Lens Black IR LED Camera

# SIR-4160

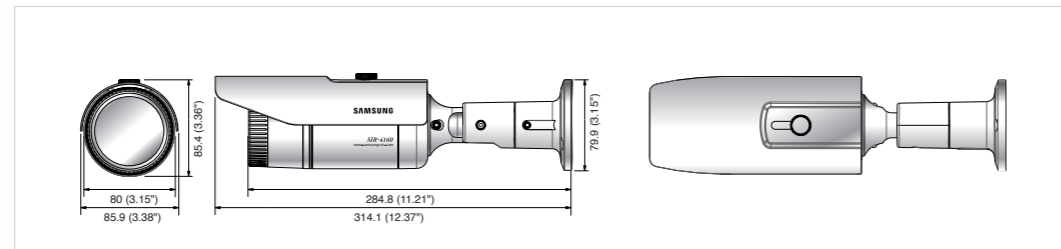


## Specifications

	SIR-4160N	SIR-4160P
<b>ELECTRICAL</b>		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 7.8W (LED On)	
<b>VIDEO</b>		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. Illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512X) B/W : 0Lux (LED on)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p, 75	
<b>LENS</b>		
Zoom Ratio	3.6X (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Objecy Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
Focus	Manual	
Iris Control	Auto / Manual	
<b>OPERATIONAL</b>		
On Screen Display	Korea, English, Japan, Spanish, French, Portuguese	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 Programmable zones)	
Digital Zoom	On / Off (1X ~ 16X)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 Programmable zones)	
2D+3D Noise Filter (SSNRIII)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512X)	
Gain Control	Low / High / Off	
White Balance	AWC, Manual, Indoor, Outdoor, ATW (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	Fixed (1/60 / Flickerless)	Fixed (1/50 / Flickerless)
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	Coaxial (Protocol : Pelco Coaxitron), RS-485	
<b>ENVIRONMENTAL</b>		
Operating Temperature / Humidity	-10°C ~ +50°C / 20% ~ 80% RH	
Storage Temperature / Humidity	-20°C ~ +60°C / 20% ~ 95% RH	
<b>MECHANICAL</b>		
Dimension (WxHxD)	85.9 x 85.4 x 314.1mm (3.38" x 3.36" x 12.37")	
Weight	1Kg (2.2 lb)	
IR LED	32EA	
IR Distance	50m (164ft)	
Ingress Protection	IP66	
Certifications	FCC (Class A)	CE (Class A)

## Dimensions

Unit : mm (inch)



Design and specifications are subject to change without notice.



SAMSUNG TECHWIN



No Fear of the Dark  
Ultra Low Light Levels of 0 Lux!



# SIR-4160

High Resolution Built-in Varifocal Lens Black IR LED Camera

- High resolution IR camera with high resolution of 600TV lines
- Equipped with high performance black IR LED, 50-meter monitoring range
- Dustproof and waterproof (IP66)
- Twin glass
- OSD menu access via coaxial telemetry



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www.samsungcctv.com

The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.



**SAMSUNG TECHWIN CO., LTD.**  
145-3, Sangdaewon 1-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do Korea 462-703  
Tel : +82-31-740-8151-8 Fax : +82-31-740-8145  
www.samsungcctv.com

**SAMSUNG TECHWIN AMERICA Inc.**  
1480 Charles Willard St, Carson, CA 90746, UNITED STATES  
Tel Free : +1-877-213-1222 Fax : +1-310-632-2195  
www.samsungcctvusa.com

**SAMSUNG TECHWIN EUROPE CO., LTD.**  
Samsung House, 1000 Hillwood Drive, Hillwood Business Park  
Chertsey, Surrey, UNITED KINGDOM KT16 OPS  
Tel : +44-1932-45-5300 Fax : +44-1932-45-5325

**TIANJIN SAMSUNG TECHWIN OPTO-ELECTRONICS CO., LTD.**  
No. 11 Wei 6 Street, Micro-Electronic Industrial Park  
Jingang Road, Tianjin, P.R. CHINA 300385  
Tel : +86-22-23887788 Fax : +86-22-23887788

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# WV DSP Allows for Visibility of 50m!

## Core Technologies

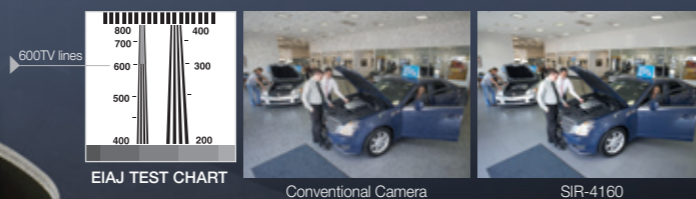
### Samsung Techwin's Proprietary Technology WV DSP for High Resolution Monitoring

W-V, an embodiment of Samsung Techwin's commitment to technological development, is a fifth-generation DSP chipset that enables high resolution of 600TV lines. Samsung Techwin packs quite a bit of technology into the small chip to deliver unmatched cost-effectiveness. The chip features SSNRIII "image noise" elimination using upgraded 2D/3D filtering to ensure clear images in the darkness, day & night, SSSDR, HLC highlight backlight compensation, image stabilization, multiple language OSD and other high-end features.

## High Resolution

### Superb Color Image Quality at 600TV lines Resolution!

Thanks to the DSP W-V chipset, Samsung Techwin's Proprietary Technology, the SIR-4160 boasts stable and precise image processing, delivering high-quality images with a color resolution of 600TV lines.



SSDR

600TVL

Multi Language OSD

D&N

DIS

OLux

SSNR III

HLC

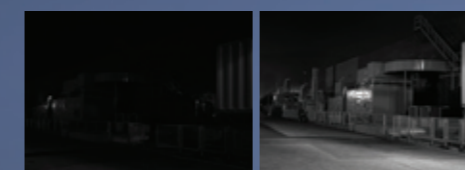
## High Resolution Black IR LED Camera SIR-4160

The SIR-4160 is a high resolution IR LED camera that can capture images within 50 meters in extremely low or no lighting using its built-in black IR LED lamps. In addition, it boasts excellent performance in monitoring factory compounds, stores and warehouses using a built-in 3.6X varifocal lens (2.8 ~ 10mm).



### 0Lux, No Additional Illumination required

With built-in high performance IR LEDs, the SIR-4160 can capture even tiny movements in complete darkness.

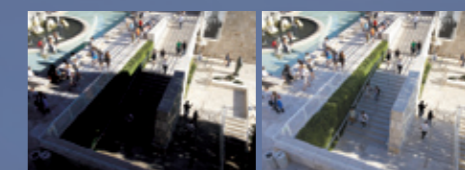


Conventional Camera

SIR-4160

### SSDR (Samsung Super Dynamic Range)

In backlit conditions, where there is a clear distinction between bright and dark areas, the SIR-4160 selectively brightens dark sections, ensuring virtually homogeneous brightness across the image.



Conventional Camera

SIR-4160

### Equipped with High Performance Black IR LED

Using high-performance black IR LEDs, which are four times brighter than normal ones, the SIR-4160 clearly detects objects in the dark with low power. In addition, you can set the number of LEDs used from 16 to 32 to brighten an object's surroundings.



### Dustproof & Waterproof

The SIR-4160 has a perfect waterproof and dustproof design, performing superbly in all-weather conditions.



### Easy-to-Use Standalone Camera

The SIR-4160 is a standalone outdoor camera that can be installed instantly without the hassle of housing.



### Flexible Varifocal Lens

Built with a 3.6X, 2.8-to-10-millimeter varifocal lens with adjustable viewing angle and optimized view and focus settings, the SIR-4160 is ideal for monitoring wide areas.



Normal

3.6X

